

UNITED STATES PATENT AND TRADEMARK OFFICE
CERTIFICATE OF CORRECTION

PATENT NO. : 7,242,136 B2
APPLICATION NO. : 10/796102
DATED : July 10, 2007
INVENTOR(S) : Young Sung Kim

Page 1 of 5

It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

The Title Page, showing an illustrative figure, should be deleted and substitute therefor the attached Title Page.

Delete drawings sheets 6 of 9, 7 of 9, and 9 of 9 and substitute therefor the drawing sheets, consisting of figs 8, 9 and 11 as shown on the attached page.

Signed and Sealed this

Twenty-second Day of July, 2008

A handwritten signature in black ink, appearing to read "Jon W. Dudas". The signature is stylized with a large, looped initial "J" and a cursive "Dudas".

JON W. DUDAS
Director of the United States Patent and Trademark Office

(12) **United States Patent**
Kim et al.

(10) Patent No.: **US 7,242,136 B2**
(45) Date of Patent: **Jul. 10, 2007**

(54) **FRONT FILTER, AND PLASMA DISPLAY APPARATUS HAVING THE SAME**

(75) Inventors: Young Sung Kim, Yongin-si (KR); Kyung Ku Kim, Seoul (KR); Hong Rae Cha, Seoul (KR); Myeong Soo Chang, Oeiwhang-si (KR); Byung Gil Ryu, Seoul (KR); Eun Ho Yoo, Goyang-si (KR)

(73) Assignee: **LG Electronics Inc., Seoul (KR)**

(*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 334 days.

(21) Appl. No.: 10/796,102

(22) Filed: Mar. 10, 2004

(65) **Prior Publication Data**

US 2004/0178729 A1 Sep. 16, 2004

(30) **Foreign Application Priority Data**

Mar. 11, 2003 (KR) 10-2003-0015174

(51) Int. Cl.

G06F 3/033 (2006.01)

G09F 9/00 (2006.01)

H01J 61/40 (2006.01)

(52) U.S. Cl. 313/112; 313/582; 359/885; 359/577

(58) Field of Classification Search 345/173-178; 178/18.01-20.06

See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

| | | | |
|-------------------|---------|------------------------|-----------|
| 4,794,634 A * | 12/1988 | Torihara et al. | 379/93.19 |
| 6,061,177 A * | 5/2000 | Fujimoto | 359/443 |
| 6,087,012 A * | 7/2000 | Varaprasad et al. | 428/428 |
| 6,215,477 B1 * | 4/2001 | Morrison et al. | 345/173 |
| 6,876,355 B1 * | 4/2005 | Ahn et al. | 345/173 |
| 6,887,631 B2 * | 5/2005 | Kiguchi et al. | 430/7 |
| 6,933,086 B2 * | 8/2005 | Sakurada | 430/7 |
| 7,053,886 B2 * | 5/2006 | Shin | 345/173 |
| 2003/0122801 A1 * | 7/2003 | Yu | 345/173 |
| 2003/0062410 A1 * | 3/2005 | Bell et al. | 313/506 |

FOREIGN PATENT DOCUMENTS

JP 10-163671 * 6/1998

* cited by examiner

Primary Examiner—Ashok Patel

(74) Attorney, Agent, or Firm—Ked & Associates, LLP.

(57) **ABSTRACT**

The present invention relates to a front filter having a touch screen, and a plasma display apparatus having the same. The front filter installed on a front surface of a panel of a plasma display apparatus, the front filter including: a touch screen for generating a coordinate signal with respect to a touch point.

22 Claims, 9 Drawing Sheets

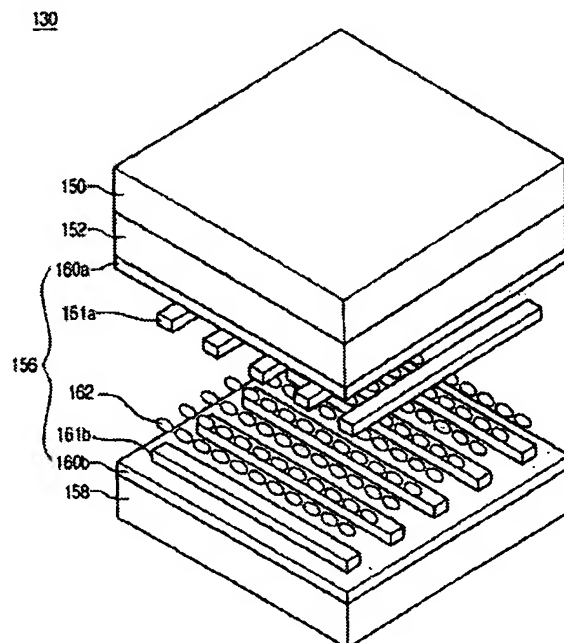


Fig. 8

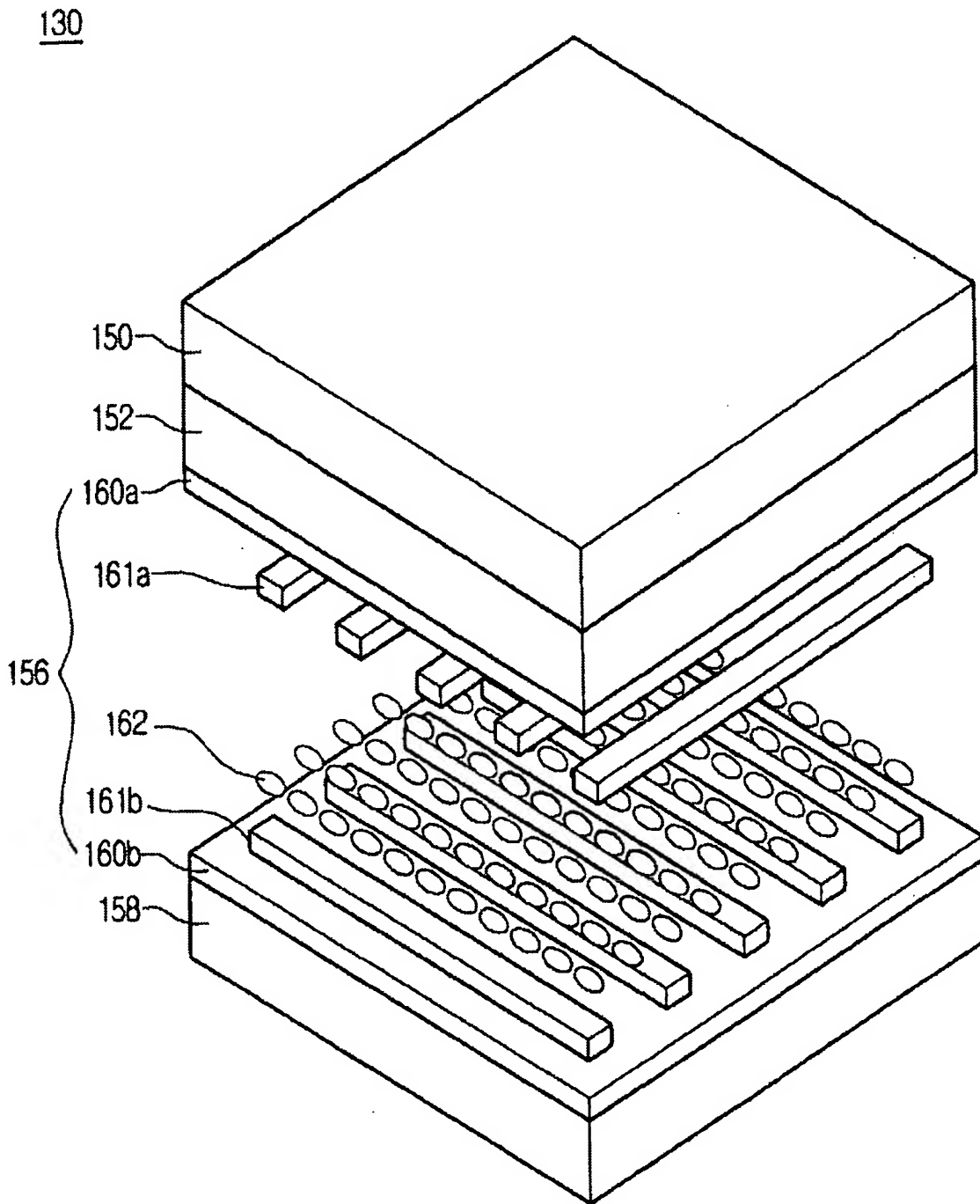


Fig. 9

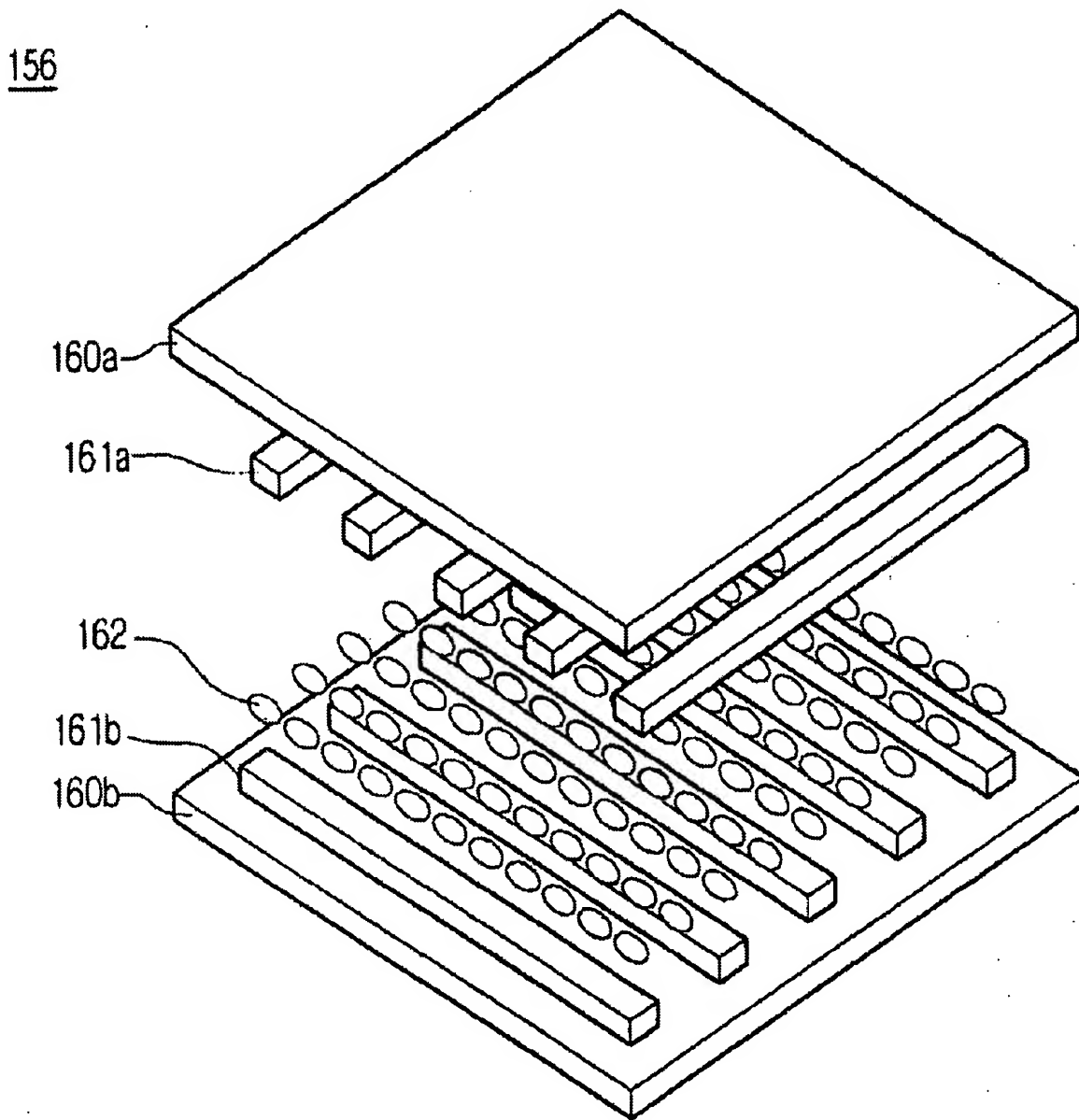


Fig. 11

256

